

WHAT IS CLAIMED IS:

1. A test apparatus with loading device, comprising:  
  
a chuck which is provided with a chuck drive, by means of which the chuck can be displaced within a working area;  
  
a carriage arranged to be displaced between a first position inside the working area close to the chuck and a second receiving position outside the working area; and  
  
a receiving member mounted on said carriage for receiving test substrates;  
  
wherein said receiving member and said chuck are arranged for vertical movement with respect to each other when said carriage is in said first position.
2. The test apparatus as claimed in claim 1, wherein said working area of said chuck is surrounded by a housing, wherein said second receiving position is located outside said housing, and wherein an opening, which can be closed off by a flap, is provided in the housing.
3. The test apparatus as claimed in claim 2, wherein the carriage has a carriage drive which is connected to the housing.
4. The test apparatus as claimed in claim 1, wherein the carriage has a carriage drive, which is connected to the chuck drive.
5. The test apparatus with loading device as claimed in claim 1 wherein there is provided a vertical drive for moving the carriage vertically with respect to the chuck.
6. The test apparatus as claimed in claim 1 wherein the carriage is arranged below a bearing surface for a test substrate.
7. The test apparatus as claimed in one of claim 1 wherein said carriage comprises at least one telescopic rail arranged laterally adjacent to the chuck.

8. The test apparatus as claimed in claim 1 wherein the receiving member is provided with a forceps holder for receiving forceps which hold the test substrate, and the chuck is provided with three lifting pins, which can move perpendicular to a bearing surface between a first position, in which the upper tip of each lifting pin lies in or below the bearing surface, and a second position, in which the tip of each pin is located a selected distance above the bearing surface.

9. The test apparatus with loading device as claimed in claim 8, wherein the forceps holder is provided with a vertical support, the forceps holder being at a selected vertical distance from the carriage.

10. The test apparatus as claimed in claim 1 wherein said chuck comprises a chuck body with a chuck surface and wherein the receiving member comprises a chuck plate which rests on the chuck surface and is provided with a bearing surface and wherein the chuck plate is arranged to be detached from the chuck body, wherein the chuck plate has at least three lugs projecting above the chuck surface, and wherein the receiving member has an opening with an opening surface area which is similar to the chuck surface, such that the receiving member, in the first position at least partially surrounds the chuck body without contact and at a spacing therefrom which is smaller than the extent by which the lugs project above the chuck surface.

11. The test apparatus as claimed in claim 10, wherein the lugs are integrally connected to the chuck plate.

12. The test apparatus as claimed in claim 10, wherein the lugs are fixedly connected to the chuck plate.

13. The test apparatus as claimed in one of claims 10 wherein the receiving member comprises a plate in which the opening is formed.

14. The test apparatus with loading device as claimed in claim 1 wherein the chuck comprises a chuck body with a chuck surface and a chuck plate which rests on the chuck surface is provided with a bearing surface and can be detached from the chuck body, wherein the chuck plate, on its underside, has first holding members, which engage releasably in second holding members, which are connected to the chuck, wherein the carriage can be pushed in from the outside from the first receiving position, and wherein the carriage has a third holding member, which engages releasably into a fourth holding member on the chuck plate.

15. The test apparatus with loading device as claimed in claims 14 wherein the chuck plate has, on its right-hand and left-hand sides, as seen from the second receiving position, longitudinal guides which run parallel to the direction of motion between the first position and the second receiving position, wherein the carriage has two inner guide rails, within which the longitudinal guides can be pushed in, and wherein outer guide rails into which the carriage can be pushed are provided in a fixed location relative to the second receiving position.

16. The test apparatus as claimed in claim 1 wherein the receiving member comprises a substrate carrier having a first holding members on a lower side thereof which engage releasably in second holding members connected to the chuck, wherein the carriage can be pushed in from the first receiving position, and wherein the carriage has a third holding member which engages releasably in a fourth holding member on the substrate carrier.

17. The test apparatus as claimed in claim 16 wherein the first holding member comprises a guide groove into which the second holding member comprising a holding pin engages.

18. The test apparatus as claimed in claim 17, wherein the guide groove has a groove edge which reduces the guide groove width to a slot in the edge region of the guide groove, and the holding pin has a mushroom-like head which engages beneath the groove edge of the guide groove, it being possible for the holding pin to move longitudinally in the slot.

19. The test apparatus with loading device as claimed in claim 17 wherein the substrate carrier has, on its right-hand and left-hand sides, as seen from the second receiving position, longitudinal guides which run parallel to the direction of motion between first position and the second receiving position, wherein the carriage has two inner guide rails, within which the longitudinal guides can be pushed in, and wherein outer guide rails into which the carriage can be pushed are provided in a fixed location relative to the second receiving position.

20. The test apparatus as claimed in claims 19 wherein four holding pins with upwardly facing heads and two guide grooves lying parallel to the straight lines of movement are provided, in each case two holding pins corresponding to each guide groove, wherein the holding pins are connected in a vertically movable manner to the chuck or the chuck body and are pulled under spring load into their lower position, wherein as the guide grooves slide onto the holding pins the base surfaces of the guide grooves are supported on top points of the heads, with the guiding longitudinal sides being released from the inner guide rails.

21. The test apparatus as claimed in claim 16 wherein the fourth holding means is arranged to be detached from the third holding means from the outside.